Executive Summary

FOOD CENTER

THE CITY OF NEW YORK



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HUNTS POINT FOOD CENTER

THE CITY OF NEW YORK

City of New York
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Economic Development Administration

Honorable RICHARD LEWISOHN, Administrator

Department of Marine and Aviation

Honorable HERBERT B. HALBERG, Commissioner

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Progress in recent years in food processing and distribution methods has made most of the existing wholesale food market in the city of New York practically obsolete. This progress has resulted in developments that have changed the character of the industry. More preparation of the food product is done before it reaches the retailer. Portion control, pre-packaging, and flash-freezing are but a few of the terms illustrating the new developments in the industry. Another influencing factor is the United States Department of Agriculture's increased health and sanitary requirements in food handling. To comply with these new standards many markets in the New York area require major alterations and renovations.

Many of the markets are housed in 140-year old inadequate, multi-storied buildings, which have an abundance of unused space and are inefficient in operation. Few of the buildings were designed for their present use and even these are now outdated. Existing locations are no longer suitable principally because of the significant changes in land use.

Traffic at existing market areas is severely congested and the situation is becoming worse. Most streets are too narrow to permit perpendicular parking, thus long vans use more of the limited street frontage for parallel parking. At rush hours many trucks cannot be accommodated at the loading docks and the waiting periods are for hours. Many larger trucks are required to unload elsewhere into smaller trucks for delivery to the market. Few of the market operators have direct access to the railroads so rail shipments have to be transferred by truck. Many of the markets do not have rear accesses so the trucks must load and unload at the front. Unloading must be on to sidewalks since there are no loading platforms. The display of wares on streets and sidewalks adds to the traffic problems. These assorted antiquated methods result in high costs to the wholesaler, retailer, and eventually, the consumer.

In an attempt to keep pace with modern food processing technology, the city of New York has acquired land at Hunts Point in the Bronx to consolidate the food industries. Although Hunts Point is seemingly remote from downtown New York, it is easily accessible to buyers and sellers by rail, water, or expressway. The newly-constructed Terminal Produce Market is the first step forward in establishing Hunts Point as a Food Center.

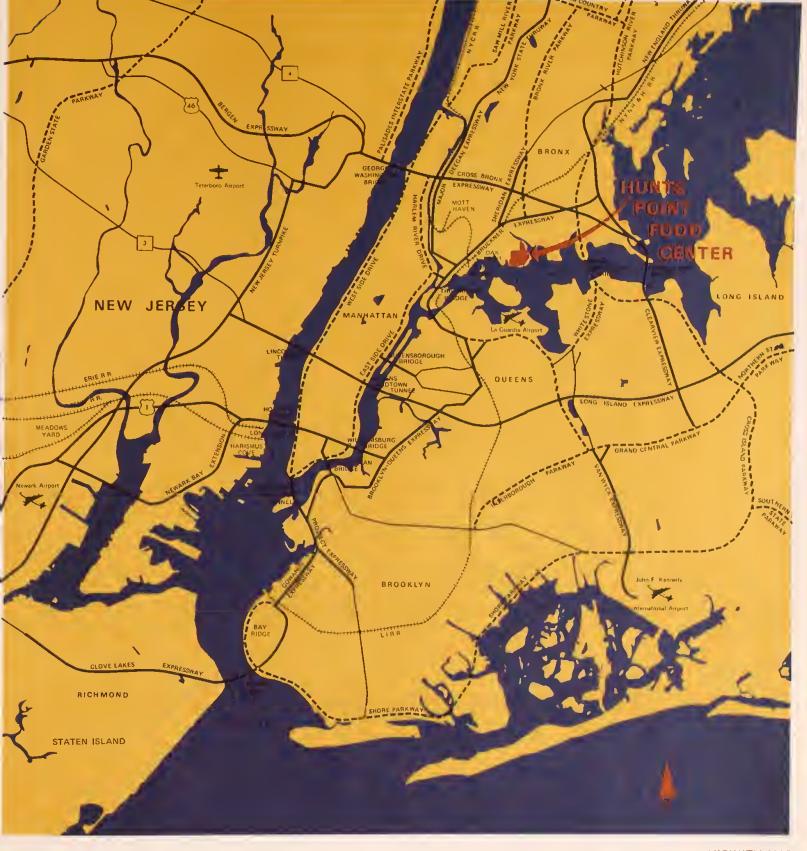
The 266 acres acquired adjoin the Terminal Produce Market

and they will be dedicated to the City's wholesale food markets, and form a new heart for the entire food distribution system of New York City. This Food Center will be developed as an industrial park, maintaining the free-enterprise character of the markets with the land and buildings owned by the City and leased to the tenants. New jobs will be created in the market as methods of food processing and distribution improve and total volume and value of the products increase. Employment opportunities will be broadened for semi-skilled and skilled workers in this and other areas.

The land areas vacated by the consolidation of the markets will be used for purposes more compatible with their environment. Evidence of progress in this sector exists throughout New York City. Plans are underway for an urban redevelopment at the site of the Bronx Brook Avenue Market and studies are being made for the redevelopment of the Fulton Fish Market area. The new World Trade Center is located in the area vacated by the produce market. The improved land and new buildings will increase the property value thereby resulting in a better tax base.

The main objective of the Master Plan developed herein for the Hunts Point Food Center is to provide the most beneficial utilization of the land available for the consolidation of the wholesale food markets of the city of New York. Candidates for consolidation include the meat, poultry, fish, flower, cheese, butter, and egg markets. In addition, provision has been included for related food processing industries and services for the benefit of the market tenants. For the most part, the tenants will control the design of their facilities to suit their individual needs, but these will be subject to guidelines to ensure a degree of compatibility for all concerned.

Major consideration is also given to grouping similar businesses within the overall market area and accommodating the necessary transportation facilities which vary from one group to another. Traffic circulation and parking of the great amount of vehicular traffic anticipated is reflected in the plan. Further, for compatibility with the surrounding area, the separation of the neighboring residential and industrial activities has been respected. The plan developed is flexible, recognizing that the future may include tenants, methods, and even industries beyond present thinking. Provision is made for a wide range of alternatives for changing needs and future growth.



VICINITY MAP



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The development of a Food Center at Hunts Point will have a strong impact on food distribution in New York City. With improved facilities, market productivity will increase, and an expansion of the type of products handled will be competitive with other markets in the New York region. It will be one of the few opportunities presented to the food industries in the City to develop new facilities without undue restriction of land or buildings.

In developing a market concept, existing markets and plans for their development were analyzed. Many studies prepared by the Department of Agriculture and independent architects and engineers have made specific analyses of markets in the Hunts Point area. General data developed by these studies were used as criteria for planning of the Food Center.

The goals of the Master Plan were to develop a plan concept which would make the best utilization of the land available for the development of a Food Center. Flexibility of design and planning was required so that the complex could develop in accordance with changes enjoined by the food industry. Consequently, a food distribution market could not be developed without having some impact on the associated areas within its field. As a result, the Hunts Point Peninsula was studied and a total developmental concept proposed.

THE SITE AND ITS ENVIRONMENT

While the Food Center is intended to have a very profound effect on its environment, certain factors of major influence that will govern its development are present on the Peninsula. Land use on the Peninsula is primarily industrial with a small portion of the land devoted to residential development. Being

an older section of the Bronx, there has been no major redevelopment in the area for several years.

New York City—owned facilities in the area include sewage and trash disposal stations. Plans for expansion and relocation of these facilities have aided in improving market development. The marine transfer station of the Department of Sanitation is proposed to be moved from the market area to the land area west of the sewage treatment plant. Expansion of the sewage treatment plant will probably be required by the Department of Public Works to serve the growing needs of the Bronx. Proposed planning of these facilities will improve land use and development potential on the Peninsula, and more particularly, in the Food Center area.

Circulation on the Peninsula is poor and will require study for new construction to improve access to the Peninsula and the Food Center. Public transportation, shipping, and rail service were all once important services to this area. However, the declining need for these services has terminated or limited their use. These services represent a vital arm that will link the consumer to the market and should be restored as the needs of the market are established.

The existing Terminal Produce Market has been considered a part of the total Food Center and together, they represent 102 acres. This Produce Market has been open for one year and is the catalyst for food industry expansion on Hunts Point. The new Food Center will expand wholesale and food processing potential on the Peninsula and provide further momentum for food industry development.



PLAN CONCEPT

The plan concept of the market has developed major land areas for market uses. The market's road system has divided land into water oriented and non—water oriented uses. The land along the East and Bronx Rivers has access to water transport methods and has been generally proposed for shipping uses. Inland areas of the market are devoted to non—water oriented uses.

The Meat and Poultry Market is the largest facility planned for the Food Center. Total land planned for this market is approximately 87 acres which is sufficient for most of New York's meat markets. Approximately 1,631,000 square feet of buildings may be developed on this site for tenant and market use. The Hunts Point Cooperative Market, Incorporated has leased 37 acres within the market area to form the basis for market building development. The Master Plan has expanded this area to provide an overall unified concept.

The Fish Market has been located on a 29—acre site adjacent to the East River. This water—oriented market can have direct water access to enable fishing vessels to bring the product directly to the market. This market is anticipated to be developed by a single cooperative group. Planning has evolved around the principal functions of wholesalers, processing, and purveying, so these functions have been divided into the two buildings provided. The acreage developed has included portions of the existing marine transfer station of the Department of Sanitation. As this City facility is being proposed for relocation, the Master Plan has made maximum use of available land.

The Fruit Auction Terminal, adjacent to the Produce Market, is an important adjunct to the Food Center's operations. It will expand the wholesale market capability of the Food Center and provide expanded capacity for the Terminal Produce Market. The 15—acre site provided for the terminal can support approximately 189,000 square feet of buildings for this function. Water orientation along the Bronx River offers a limited barge transportation access.

The Butter, Egg, and Cheese Market is planned for the 26—acre site along the 8ronx River. The 320,800 square feet of buildings provided for this function has been optionally established for this land. The needs of this market or the necessity for it to move have not been confirmed. Should this market decide not to use the land provided, other market development, such as food processing or purveying, could use the land.

The Service Center is located between the Terminal Produce Market and the new Food Center. This 10—acre site is planned for facilities which can support the administrative and ancillary needs of the Food Center. The 321,050 square feet of building area in the Service Center will provide space for three major uses: offices, commercial, and truck service and maintenance. Types of facilities in this area should

support the market's requirements. The office building should provide space for government food regulating agencies, food industry organizations, labor groups, transportation functions, and communication and data services. The commercial area should provide space for sales, leasing, and renting of food industry equipment. Restaurant and banking activities may be included in this area to support the market's needs. The truck maintenance area can include servicing facilities for all trucks using the Food Center. A service station, public scales, and truck driver rest area or motel can be part of this total complex.

The Refrigerated Warehouse will serve the needs of the entire Food Center. This vital adjunct to the center will provide refrigerated storage area to handle the changing needs of the Food Center's markets. The 13—acre site for this function has been placed adjacent to the waterfront activities in the Deep Sea Terminal. While supporting the market's needs, the 242,000 square feet of building can provide service to shipping activities to and from the Food Center.

The Food Processing Industry will become an important function of the Food Center and will provide a stronger base for the establishment of food industries at Hunts Point. Basic products processed can be more numerous than the types of wholesale markets developed on the Peninsula. Vita Foods, Inc. has leased land adjacent to the Fish Market and will be involved in processing fish products. Two other processors having four—acre parcels have been planned in the same area. The 87,000 and 75,700—square foot facilities planned here would centralize processing functions in the area of the Refrigerated Warehouse and Deep Sea Terminal. These latter two functions can provide support for the processing industry.

Processors should be considered for occupancy of wholesale market areas that do not develop. The demand for this type of function, as expressed by the industry, is high. Should the Food Center become saturated with wholesale markets, food processors should consider developing land adjacent to the total complex or on the Peninsula.

The Deep Sea Terminal is planned for the 12—acre parcel of land on the southeastern tip of the Food Center. Ocean—going vessels will have direct access to the East River Channel for movement to New York harbor or the Atlantic Ocean. This terminal is planned to support the import and export activities of the Food Center. Approximately 120,000 square feet of building will serve as a cargo transfer and interim storage facility. Unit train, carload, and container activities can be supported in the open yard area. It should be noted that this terminal is planned for the Food Center and food industry use only. However, interim use of the Deep Sea Terminal by other industries may be required to establish this function; as market and food industries expand, use could be converted for other food products.



The Banana Terminal is planned adjacent to the Fish Market. The eight—acre site for this function will serve as a transfer point for bananas from ships to railroad cars or trucks. Ships bringing bananas to the market will be able to dock at pier facilities adjacent to the East River Channel. Multiple rail spurs are provided to serve the high banana volume in conjunction with truck shipping requirements.

This terminal has been considered as an optional Food Center development. The high rail service requirements make it desirable for a location adjoining or a part of the railroad yard. An alternate location for this terminal could be the Oak Point lighterage yard on Hunts Point Peninsula. Adequate rail service can be provided and additional land may be available for development of banana storage and ripening facilities.

Several small land areas not oriented to market use were developed as a result of road, rail, and market planning, and leases signed. The four acres of land created are proposed as park areas for the Food Center. The areas may also serve as locations for sewage lift stations and electrical substations.

Several changes have been recommended for the existing Terminal Produce Market. East Bay Avenue is proposed to be reopened and become part of the Food Center road system. This will necessitate relocation of the market's toll plaza to Randall Street. The relocation of this entrance will aid in separating produce traffic from other market traffic, and will be a major traffic improvement to the entire development. Other existing facilities along the new roadway, which include parking and a service station, would be relocated in the Terminal Produce Market or Food Center.

The proposed Food Center and the existing Terminal Produce Market represent the base for new development of the wholesale and processing food industries in New York City. It is important that these food areas be planned as a single functioning unit so that optimum utilization of land and services can be developed and sound growth achieved.

The impact of the development of food industries on Hunts Point has been realized with the establishment of the Terminal Produce Market. Subsequent establishment of other produce industries outside of the market area will further highlight this realization. The development pattern established by this market will be typical of other food industry development on the Peninsula.

Vital services to the Food Center must be developed or improved to serve market needs. Zoning regulations should be established to limit development to food—related industries at Hunts Point. Circulation must be improved to allow market vehicles to move through the Peninsula without conflicting with existing traffic.

PROGRAM

A program for the Food Center evolved from the plan concept and realized total saturation of all net usable land with buildings and truck and automobile areas. A total net land area of 228 acres was developed and contains over 3,700,000 square feet of wholesale, purveying, processing, refrigeration, and terminal building space. Collectively, the market facilities can serve 14,000 vehicles during a normal day.



VIEW 1 - OFFICE BUILDING IN THE SERVICE CENTER

The program is a base for development and may be subject to change as the market develops. The more dynamic meat markets should be given greater latitude for development. Optional areas such as the Butter, Egg, and Cheese Market and the Banana Terminal should be substituted by processors or other markets if they do not develop in the near future. All market land must be productive to preclude long—term vacancies resulting in revenue losses.

ALTERNATE PLAN CONCEPT

In anticipation of a changing development of the market, an alternate plan was developed to divide land into smaller parcels ranging from three to twelve acres in size. Signed leases and tentative lease areas were respected as originally planned.

New roads are required in the alternate plan to serve all of the parcels developed. The addition of these roads reduced the net usable area to 221 acres and yielded 33 separate parcels, including leases held by the Hunts Point Cooperative Market, Incorporated and Vita Foods, Incorporated.

The alternate plan should be used only as a final development measure. Again, areas such as the Meat and Poultry Market and Deep Sea Terminal should remain open for those uses as long as possible.

DEVELOPMENT PHASING

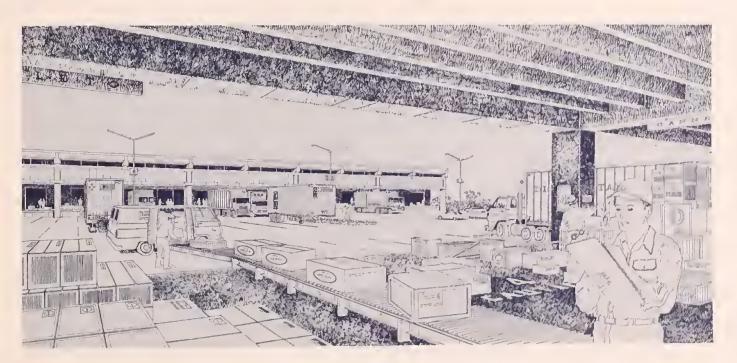
Development of the market has been divided into two phases. Phase I includes all of the land above water and related fill to make maximum use of land available, and the basic road and utility system that will be required. All of the principal land exchanges required will be completed in Phase I.

Phase II involves the created land southeast of the property. Land use planned for this area includes food processors, a portion of the Refrigerated Warehouse, and the Deep Sea Terminal. This land area is presently more costly to develop than inland areas; however, as expansion occurs, this land will become more feasible for development.

CIRCULATION

Traffic circulation in the market area represents the arm that reaches around the country for food products and brings them to the Food Center, then distributes them to the local markets. The goals of minimum time and cost are paramount to reduce overall costs to the operators and consumers.

All of the principal modes of transport that the market may use are available in the Hunts Point area. Major expressways lead from the Peninsula area and link to other expressways serving the region. The main line of the New York, New Haven, Hartford Railroad Company traverses the Peninsula and connects directly to the Oak Point Yard. The East River is the principal waterway that links the Food Center with the New York harbor and the Atlantic Ocean.



VIEW 2 - BUILDINGS IN THE MEAT AND POULTRY MARKET

Truck and automobile traffic represents the major movement of vehicles in the market. Approximately 10,000 trucks and 4,250 automobiles will move in and out of the market during a normal day. Inbound traffic bringing the products to the market will be principally from the West and New Jersey area. The probable route used will be via the George Washington Bridge to provide relief to Manhattan traffic.

Outbound traffic distributing the products from the market will be concentrated toward Manhattan, Oueens West, Brooklyn, and New Jersey. The traffic moving toward the New Jersey area will encounter no major difficulties; however, traffic moving toward the urban areas will encounter problems of available streets and existing volumes.

Inbound traffic to market will peak between 5:00 a.m. and 6:00 a.m. with a volume of approximately 2,120 vehicles. Outbound traffic will peak between 7:00 a.m. and 8:00 a.m. with a volume of 1,600 vehicles. This total movement will require approximately nine traffic lanes in each direction from the market during the peak hours.

Traffic circulation within the Peninsula can be satisfied by using selected routes and improving road widths, paving, and restricting parking. Major circulation difficulties will be encountered in movement across the "Bruckner Strip" which is composed of the Bruckner Expressway and Bruckner Boulevard. On and off ramps from the Bruckner Expressway are not available in the immediate vicinity and all trucks moving to the Manhattan, Oueens West, and Brooklyn areas will be required to use surface streets. Existing traffic

conditions along the "Bruckner Strip" will afford major conflict to market traffic.

It is recommended that Halleck Street, Randall, East Bay, and Ryawa Avenues be used as major truck routes. A proposed extension of Oak Point Avenue to Walnut Avenue will provide a bypass which will parallel but not cross the "Bruckner Strip". These traffic recommendations will be minimum requirements to satisfy the Food Center's needs.

The circulation plan presented is only a partial solution to the growing traffic needs of Hunts Point. The potential growth of the food industry and redevelopment of inland areas will all make a major contribution to traffic in this general area. Traffic analyses must be made to encompass all of these development potentials and a single solution must be provided for traffic circulation in the southeast Bronx area.

Railroad service to the Food Center will be provided by the New York, New Haven, Hartford Railroad Company. Existing rail yards in the Peninsula area can provide service for carload, piggyback, and container shipments. Extensions of the rail line from the Terminal Produce Market and Oak Point Yard will afford direct rail service to the Food Center.

Air service is a growing transportation mode and service is provided to major airports in the New York area although containerization and helicopter use is still relatively undeveloped. Exploitation and expansion of this service can provide an excellent means for transfer of food products from airports to markets and possible distribution to major consumer areas.



VIEW 3 - FISH MARKET PIER AREA

ENVIRONMENTAL FACTORS

The plan concept of the market presents the basic form that the Food Center will assume when developed. The environment of the market will be created by the industries of the Food Center. The architecture, landscaping, and industrial aspects of the market will be the major elements of the environment.

Architecture will be the most predominant feature of the Food Center. Tenants and markets will develop buildings to serve their own particular needs. Important to these markets are the functional, design, cost, and maintenance factors of building construction and use. Additionally, building design must respect the development of other markets and the Food Center as a whole.

Functional design must be employed to include flexibility of use. Markets must have the capacity to change with the needs of the food industry. Designs and materials used must satisfy Government building and health requirements, and more particularly, those standards established by the U.S. Department of Agriculture. Cost of construction, while an important investment factor, should not sacrifice long—term building use and maintenance.

The sketches shown in this Synopsis are an indication of market building designs. Two types of buildings have been developed for market use: structural steel and concrete. The structural steel frame building provides a structure that is light in weight and capable of long spans. Exterior finishes could be prefabricated metal panels at the second floor level and concrete block at the ground floor. The concrete buildings shown are precast construction. While generally heavier in total weight, precast concrete surfaces provide satisfactory finishes for use in food handling areas. The exterior material is precast concrete panels at both floors, and is used to complete the theme of the building. The buildings selected for market use should consider long—term use as most leases will extend a minimum of 20 years. Flexibility in building interiors should be considered to provide for anticipated changes. Utilities and refrigeration in particular must be adaptable to changes in cooling requirements.

Individual market buildings and tenant units were analyzed by this study to determine building sizes for the plan concept. These studies included: the Meat and Poultry Market; the Fish Market; the Butter, Egg, and Cheese Market; and the Flower Market. Other market studies prepared by architects and the U.S. Department of Agriculture were used as a basis for study.

Basic units were adapted to a 12—foot module width of three or more modules, or a minimum of 36 feet. The 12—foot module width is used to adapt to truck operating and parking requirements. The depth of units can vary according to the area requirements of the particular market. Emphasis should be placed on having the units as square as is feasible and minimizing rectangularization.



VIEW 4 - TYPICAL FOOD CENTER PROCESSOR

Landscaping will be an important requisite of the market and its tenants. It can provide relief to the austere appearance an industrial park develops in buildings and large parking areas. The plan has recommended a 20—foot landscape strip at property fronts along market roads. This strip, with the addition of other landscaped areas within the markets, can serve to improve the general market environment.

Industrial development methods used by market operators will be reflected in the general market environment. Old market handling methods must be replaced with contemporary material handling systems that can reduce costs to the operator, create more efficient use of space, and optimize production volumes. The new Food Center will offer this opportunity to markets, as new buildings are constructed.

Many of the existing markets in the New York area have adapted themselves to their area and particular needs that are generated by the buildings they occupy and services available. In the proposed market concept, these antiquated methods must be left behind and new concepts developed to make maximum use of building and land area.

Intra-market handling methods could be improved so that trucks could be eliminated, by use of small unit trains. Conveyor systems can replace handcart moving methods. Mechanical devices can be developed or adopted for use in the markets to handle food products to increase employee productivity. Palletization and lift equipment can improve

storage efficiency and material movement. Television monitors and audio-visual displays may be utilized to provide production control and increase efficiency.

Development standards have been recommended for the market. These include land zoning and building codes of New York City and the federal government. In addition, general regulations applicable to the Food Center development have been proposed and include building heights for market and office uses, general equipment exposure or screening limitations, signs and advertising, housekeeping, and general building setbacks. These standards are guidelines for development and are intended to raise the standards of the Food Center. Individual markets may expand these requirements to suit their specific needs to carry jurisdiction to individual tenants.

SITE DEVELOPMENT

The Food Center acreage is comprised of land purchased from the Consolidated Edison Company; property transferred from the Departments of Public Works, Sanitation, and Markets; public street vacations; and land developed by filling parts of the present underwater land areas. Net lease land in the industrial park complex is that portion of the gross acreage remaining after deductions for dedicated street rights—of—way and park areas and railroad rights—of—way.



VIEW 5 - DEEP SEA TERMINAL AREA



It is proposed that the land be developed in two phases. Phase I includes the above water land and part of the underwater land along the Bronx and East Rivers. Phase II is created land at the southeastern end of the property and consists of present underwater land outside the U.S. Government bulkhead lines.

The net land developed in Phase I is 8,767,000 square feet (201.2 acres) and in Phase II, 1,198,000 square feet (27.4 acres). The total gross land in both phases is 11,606,000 square feet (266.4 acres) and the net land is 9,965,000 square feet (228.6 acres). A portion of the site (5.8 acres) occupied by a gas—holder will not be available for use until November 1969. The Department of Sanitation marine transfer station is proposed to be relocated to the west of the Department of Public Works' facility. The station will become part of the proposed incinerator complex.

Hunts Point Avenue is the only constructed street in the area at the present time. This street will be relocated but the existing combined sewer in the street right—of—way is planned to remain in place. The existing street along the south side of the Terminal Produce Market has been planned to become a dedicated street forming part of the Food Center road system. New streets serving the market are planned as public streets and are shown on the Plan Concept.

Land which may be transferred to other City Departments includes park areas, expansion area for the sewage treatment plant, and area for possible development of a pollution control plant for the combined sewer overflow. The railroad right—of—way is planned at the outside of the perimeter road system. The railroad will form a loop system connecting from the tracks at the Produce Market through the Food Center, and then connecting to the New York, New Haven, Hartford Railroad Company main line at their Oak Point Yard.

Geology at the site is complicated by the irregularities caused by the combined effects of continental glaciation and sub-aerial erosion. Subsurface conditions have been interpreted by using information of the area general geology and site boring logs. Bedrock in the area is from 20 feet to 80 feet below mean low water. The bedrock is Manhattan Schist and is generally weathered and broken when first penetrated by the borings. The bedrock is overlain by interbedded deposits of glacial material generally capped with a layer of miscellaneous fill. The marine deposits vary from sand to clayey silts. The bedrock drops off steeply to the southeast. The fill at the surface is heterogeneous consisting primarily of cinders and debris. The softest material present are the silts. Much of the sand and gravel appears firm but the first good bottom material is the glacial till and the bedrock.

The site has been classified into three areas for the soils and foundation evaluation. The three areas denote short piles, or spread footings for buildings, medium pile lengths, or deep piles and a surcharge plan to stabilize the ground prior to building. The soil evaluation was made based upon existing data and is considered qualitative and subject to revision upon development of additional information. Underwater land development may anticipate large settlement but the occurrence should be in a relatively short time period. The perimeters of the property may be developed using dikes protected with rip—rap, cofferdams, or bulkheads.

Grading of the site includes cut and fill grading on the existing land, removal and supplanting unacceptable soil, additional fill material brought to the site, and filling of underwater lands. The area is planned to be graded to provide surface drainage to storm sewers. The lease land areas will be rough graded while final grading will be by the tenants.

Principal streets are planned to be seven lanes wide with three lanes in each direction and a center lane for left turns. Auxiliary streets will be of adequate width to serve the contributory areas. Curbs, sidewalks, street lighting, traffic signals, and striping are considered as part of the completed street network. Utility easements are planned within the street rights—of—way. The railroad track is planned at the same elevation as the street to avoid crossing conflicts. A 30—foot easement is planned for one set of tracks although two sets of tracks may be constructed, dependent upon tenant requirements and use of the adjacent land. Tenants will be responsible for switches and tracks from the rail loop to their respective properties.

The storm sewer system will be located under the street. The sewers will drain to the Hunts Point sewer or directly to the rivers. The tenants will be responsible for drainage and sewers on their property and connection to the sewer system. The sanitary sewer system will also be located under the streets and feed to the sanitary disposal facility at Ryawa Street. Sewer connections from tenants' properties and possible pretreatment of plant effluent will be the tenants' responsibility. The potable water supply system will be located under the street and the tenant will connect to the water mains. Water rates will be established by the Department of Water, Gas and Electricity.

The electrical, gas, and communications systems will be located in the dedicated street rights—of—way with service provided by the Consolidated Edison Company and the New York Telephone Company. Rates and service connections will be according to the utilities applicable rates and standard practice.

SCHEDULES

Food Center development includes the engineering, construction, supervision, and eventual maintenance of the complex. The project requires close cooperation and coordination in many areas to correlate the site development with lessee construction. Schedules should be developed using milestone or PERT networks to coordinate the activities of City agencies, public and private utility companies, site development engineers and contractors, tenants and their architect/engineers and contractor; and the business development activities of the Department of Marine and Aviation.

A package method for site development permits early preparation of sites for lessees. Bid packages are prepared in their construction sequence and site development is planned for a 16-month period with partial completion being scheduled to coordinate with lessee schedules.

COSTS

Project costs may be used for study and evaluation of the project to determine arrangements for land leasing and other real property to prospective lessees. Costs may also be used to estimate potential revenue to New York City and to estimate the number of business firms and employees for determination of the economic base for the Food Center.

The total land acquisition cost, including purchased property and assumed cost for transferred property from other City departments, is \$20,174,017. The site development cost is shown for two phases. Phase I cost is estimated at \$7,774,000 and Phase II cost is estimated at \$7,444,000. The site development cost for water, electrical, gas, and communications system is estimated at \$3,500,000. The market buildings and parcel development based upon the plan concept is estimated at \$120,939,000. The total development costs, excluding utility services estimated at \$3,500,000, are \$156,327,017. The estimated costs do not include provisions for escalation or financing charges. Based upon the assumption that the expenditures were evenly divided over a five-year period and costs escalated over the same period at a rate of 5 percent per year, the total estimated cost is \$171,960,010. This cost does not include any costs for area street improvement or proposed future streets recommended to alleviate traffic conditions for the Hunts Point Peninsula.

The land cost, including land acquisition and development based upon net leasable land, has also been formulated for the two phases of land development. Site development costs have been pro-rated between the two phases so that the portions that benefit both phases are chargeable to both phases and portions that essentially benefit one phase are chargeable to one phase. Railroad land and construction costs are included in the above costs. The total costs would be reduced by approximately \$0.10 per square foot if these

costs are not included. The total net leasable land cost for Phase I is \$3.1B per square foot and for Phase II, \$6.27 per square foot.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations of the Master Plan study have been formulated from the plan concept and the impact the new Food Center should have on Hunts Point, the Borough of the Bronx, and the New York City—based markets. Combined, these factors form a development strategy for the Food Center and basic guidelines for Government agencies to establish a sound development program for the Food Center and the Hunts Point Peninsula.

Conclusions

- Development of the new Food Center is feasible and should be accomplished to serve the needs of the residents of New York City. The acquired property on Hunts Point Peninsula contains sufficient acreage for food wholesale markets and related industries. The market area may be expanded by creating land to the southeast and by acquiring land to the west
- The location of the Food Center at Hunts Point is in a good geographical location for the receival and distribution of food products to New York City as well as the entire megalopolis
- Hunts Point may realize a continuing growth of food—oriented industries. The existing Terminal Produce Market and the new Food Center should be the catalyst for additional food industry development in the area
- The new Food Center will provide new buildings, related facilities, parking areas, and a traffic circulation system that will optimize the market's operation. It will also be competitive with the area and region markets
- Job opportunities for skilled and unskilled workers that reside in the area will be created. Market relocation will cause changes in employment and an expanded market will create new jobs
- The Borough of the Bronx should increase their revenues through taxes and payment in lieu of taxes caused by the development of the new facilities. Local merchants and businesses will be stimulated by the increase in work activity
- The use of land vacated by the existing markets should be upgraded for optimum use. Redevelopment of these lands will probably increase the tax base as well as create new employment opportunities

Recommendations

- The proposed plan concept should be adapted and variations within the alternate plan concept be thoroughly considered. The Food Center should be viable and flexible to serve the wholesale markets and related food industries in the initial and expanded phases of development
- Land exchanges should be consummated to ensure the total parcel for development
 - Planned changes for relocation or expansion of City owned area facilities should be firmly implemented to confirm the Food Center perimeter
- The U.S. Government bulkhead lines should be adjusted as shown in the plan concept
- Site development should commence as soon as feasible. Leasees will require site occupancy, access, and utilities for their respective development programs
- Business development for market and tenant leasees should continue and be accelerated as the total program progresses

- A Food Center administrative agency should be adopted to assure continuity for the development plans. The agency should be capable of providing continuing guidance and control under the direction of the Department of Marine and Aviation or another designated department
- A development plan for the Hunts Point Peninsula should be formulated to ensure locations for food oriented industries. Zoning ordinances should be considered to limit the land use
- An agreement should be formulated with the New York, New Haven, & Hartford Railroad Company for railroad service to the Food Center
- A comprehensive traffic study should be made for the Peninsula to anticipate traffic conditions as the total area is developed. New streets and alterations to existing streets should be made before the actual need so that traffic crises do not develop

The development strategy is a program that requires great initiative and planning. The program must employ civic planning at all levels and be coupled with the resources of private enterprise. The result should create the momentum to assure the sound development of the Food Center.

ALTERNATE PLAN PARCELS

Parcel		Frontag	e (Feet)	Parcel		Frontage (Feet) Parcel			Frontage (Feet)		
No.	Acreage	Street	Water	No.	Acreage	Street	Water	No.	Acreage	Street	Water
1	3.2	1,000	-	12	6.7	320	500	23	3.5	100	400
2	3.4	500	- 1	13	7.6	950	-	24	3.2	730	-
3	3.2	500	diller	14	5.0	400	400	25	6.8	570	220
4	3.4	800	_	15	4.0	400	-	26	4.5	1,050	_
5	9.8	2,100		16	8.0	100	1,150	27	3.9	850	-
6	14.7	150	1,400	17	2.2	220	430	28	3.9	300	-
7	5.0	250	430	18	2.2	220	_	29	5.6	430	_
8	3.5	230	230	19	2.0	200	_	30	8.7	550	_
9	3.5	230	230	20	2.0	200	_	31	4.7	300	-
10	3.5	230	230	21	2.5	430	540	32	37.2	3,600	-
11	3.5	230	230	22	29.2	2,200	1,700	33	11.1	1,450	-



ALTERNATE PLAN CONCEPT



